Comparisons of Job Characteristics

Focus Occupation: Airline Pilots, Copilots, and Flight Engineers (53-2011)
Associated Occupation: Commercial Pilots (53-2012)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Airline Pilots, Copilots, and Flight Engineers (53-2011)
Associated Occupation: Commercial Pilots (53-2012)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Transportation	4.6	18.7	23.1	>>	Current knowledge level is likely more than sufficient
Mechanical	6.8	14.6	11.7	<	Expanded education and/or training may be required
Geography	3.9	14.4	15.7	0	Current knowledge level may be sufficient
Mathematics	9.2	13.4	11.2	<	Expanded education and/or training may be required
Public Safety and Security	6.9	12.2	15.8	>>	Current knowledge level is likely more than sufficient
Physics	4.3	10.9	12.3	>	Current knowledge level is likely sufficient
Telecommunications	3.9	8.8	6.0	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Airline Pilots, Copilots, and Flight Engineers (53-2011)
Associated Occupation: Commercial Pilots (53-2012)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation and Control	5.4	17.7	23.0	>>	Skill level is likely more than sufficient
Operation Monitoring	6.6	15.0	18.7	>>	Skill level is likely more than sufficient
Critical Thinking	10.8	13.6	15.0	>	Skill level is likely sufficient
Judgment and Decision Making	9.4	12.2	15.2	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Airline Pilots, Copilots, and Flight Engineers (53-2011)
Associated Occupation: Commercial Pilots (53-2012)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Control Precision	6.6	15.1	17.6	>	Current ability level is likely sufficient
Far Vision	7.8	15.1	18.3	>	Current ability level is likely sufficient
Near Vision	11.1	14.8	12.9	<	Some improvement in abilities may be required
Response Orientation	4.0	13.9	20.6	>>	Current ability level is likely more than sufficient
Depth Perception	5.3	13.3	15.9	>	Current ability level is likely sufficient
Time Sharing	6.6	10.4	13.8	>>	Current ability level is likely more than sufficient
Spatial Orientation	2.7	10.3	16.9	>>	Current ability level is likely more than sufficient
Glare Sensitivity	2.6	9.3	10.4	>	Current ability level is likely sufficient
Night Vision	2.1	8.7	11.5	>>	Current ability level is likely more than sufficient
Peripheral Vision	2.2	8.5	11.4	>>	Current ability level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 100

Focus Occupation: Airline Pilots, Copilots, and Flight Engineers (53-2011)
Associated Occupation: Commercial Pilots (53-2012)

Work Activities	Exclusivity of Activity
Adhere to government aviation regulations	92
Conduct preflight or in-flight tests or checks of aircraft equipment	92
Coordinate flight activities with ground personnel	95
Direct and coordinate activities of workers or staff	3
Evaluate aircraft pilots for flying proficiency	99
Flight test new or altered aircraft	95
Follow aviation emergency procedures	92
Load/unload passenger luggage or cargo	80
Maintain flight records or logs	95
Make decisions	24
Monitor aircraft operation to detect problems	92

Operate helicopters	92
Operate navigation technology or equipment	87
Perform safety inspections in transportation setting	62
Pilot aircraft	85
Plan flight patterns	99
Read maps	42
Read navigation charts	85
Respond to in-flight data	95
Review flight data prior to flight	99
Sustain attention in air traffic emergencies	92
Teach flight school	99
Transport passengers or cargo	64
Understand English for aviation communications	89
Understand technical operating, service or repair manuals	6
Use aircraft safety regulations	85
Use established traffic or transportation procedures	78
Use knowledge of geographic coordinates	85
Use local or regional geographical knowledge to transportation	70
Use two-way radio or mobile phone	42
Use visual flight procedures	95

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Airline Pilots, Copilots, and Flight Engineers (53-2011)
Associated Occupation: Commercial Pilots (53-2012)

Tools and Technologies	Exclusivity
Aerospace location and navigation systems and components	70
Aircraft emergency systems	70
Aircraft environmental control systems and components	80
Aircraft equipment	90
Aircraft fuel tanks and systems	90
Aircraft landing and braking systems	90
Aircraft master control systems	90
Aircraft power systems	90
Calculating machines and accessories	3
Computers	1
Content authoring and editing software	1
Data management and query software	1
Educational or reference software	12
Fire fighting equipment	16
Flight communications related systems	70
Flight instrumentation	80

Industry specific software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.